

Financial and Budgetary Structure Challenges

A large number of interviewees identified financial challenges as the number one barrier to their greening efforts. In some cases, high-performance features can increase first costs from an average of two to seven percent, depending on the design and extent of added features.⁵¹ However, as many of these features have become more mainstream, there is no longer a difference in cost. So, while at times real financial limits have been the issue, frequently it is the *perception* that green building costs more that leads Federal managers, field staff, contracting officers, and others to insist on more conventional approaches to building. To some extent, this problem of perception is an issue of research and education, two topics discussed below.

A larger and more serious barrier to green building is the budgetary structure of the Federal government. The bottom line is that the long-term savings that a green building can generate, based on energy and water efficiency, potential productivity gains, and other factors, are not factored into the budgeting equation for building construction and renovation. Budget decisions are made on an “initial cost” basis—what it costs to build or renovate a building—rather than “life cycle costs”—how much initial construction or renovation decisions could cost or save over the 30 to 100 year life of a building, considering energy savings, reduced maintenance, and other factors.



Renovation of Building 33 at the Washington, D.C. Navy Yard was a pilot project for the Navy’s sustainable development program; and features sustainable and environmental design concepts, including lifecycle cost analysis.

⁵¹U.S. Green Building Council. 2003. *Building Momentum: National Trends and Prospects for High-Performance Green Buildings*. Washington, D.C.

OMB guidance to Federal agencies does in fact promote the use of life cycle costing techniques. OMB Circular A-11, "Preparation, Execution and Submission of the Budget" states: "New projects must be justified...with the least life cycle costs of all the various possible solutions..."⁵² But agencies argue that, in practice, OMB and Congress continually put pressure on them to reduce initial costs of construction projects without regard to life cycle cost savings. Furthermore, easy-to-use tools and targeted training to determine the life cycle costs of Federal buildings are needed.

A related problem is that there is usually not a line item in the budget for operations and maintenance (O&M) of individual buildings, and few agencies track the actual costs. In contrast, new buildings are a line item in the budget that is scrutinized by OMB and Congress. Furthermore, different offices within agencies usually manage construction funds and O&M funds. This makes it very difficult to compare initial costs with life cycle costs and, thereby, to track the results of using different building technologies. In addition, some agencies expressed concern that the Brooks Act⁵³ has been interpreted to constrain design budgets to six percent of construction costs, and could potentially limit the use of more in-depth environmental design approaches, including charrettes and integrated design strategies.

Individual agency rules often compound these government-wide obstacles. This was noted as a problem particularly with regard to DoD. For example, construction purchases are judged by the DoD pricing guide, which provides historical pricing data that may not reflect the prices of current green technologies.

And so, while some green buildings can be built at no additional first cost, the standard practice, favoring lower first costs, biases agencies toward less expensive, conventional approaches, material, and technologies. Consequently, the government forgoes potentially greater life cycle savings that can come from occasionally more expensive green building design methods and technologies.

⁵²Available at OMB website <<http://www.whitehouse.gov/omb/circulars/a11/02toc.html>>.

⁵³Available at GSA website <http://pbs.sunbelt.gsa.gov/idiq/documents/brooksAct_92-582.pdf>.